State of Hawaii
DEPARTMENT OF LAND AND NATURAL RESOURCES
Division of Aquatic Resources
Honolulu, Hawaii 96813

June 13, 2008

Board of Land
and Natural Resources
Honolulu, Hawaii

Request for Authorization and Approval to Issue a Papahānaumokuākea Marine National Monument Native Hawaiian Practices Permit to Mahina Duarte, National Oceanic and Atmospheric Administration, Papahānaumokuākea Marine National Monument, for Access to State Waters to Conduct Cultural Marine Resource Management Activities.

The Division of Aquatic Resources (DAR) hereby submits a request for your authorization and approval for issuance of a Papahānaumokuākea Marine National Monument Native Hawaiian practices permit to Ms. Mahina Duarte, Policy Program Manager, for National Oceanic and Atmospheric Administration, Papahānaumokuākea Marine National Monument, pursuant to § 187A-6, Hawaii Revised Statutes (HRS), chapter13-60.5, Hawaii Administrative Rules (HAR), and all other applicable laws and regulations.

The education permit, as described below, would allow entry and education activities to occur in the Papahānaumokuākea Marine National Monument (Monument), including the NWHI State Marine Refuge and the waters (0-3 nautical miles) surrounding the following sites:

- Nihoa Island,
- Necker Island (Mokumanamana),
- French Frigate Shoals,
- Gardner Pinnacles,
- Maro Reef
- Laysan Island,
- Lisianski Island, Neva Shoal,
- Pearl and Hermes Atoll,
- Kure Atoll State Seabird Sanctuary

The activities covered under this permit would occur from June 1, 2008 through August 31, 2008.

INTENDED ACTIVITIES

The purpose of these activities is to expand and advance traditional Native Hawaiian knowledge in the field of marine conservation and management. The primary objectives of the cultural expedition are to: (1) collect cultural data related to traditional Native Hawaiian marine

management; (2) refine the application of traditional Hawaiian environmental monitoring tools and methodologies; (3) recover and generate new information concerning Hawaiian mythologies.

To accomplish these objectives, cultural practitioners would undertake research that explores five key areas: the Pele, Kanemiloha'i and Kahoali'i mythologies; spatial differences of a Hawaiian moon calendar; a comparative study between select community-managed areas in the main Hawaiian islands and the Northwestern Hawaiian islands; development of a cultural assessment tool; and the relationship between local atmospheric/oceanic conditions and coral reef ecosystem productivity. Below are examples and brief summaries of a few of the proposed studies. Additional information on all five projects can be found in Appendix F-2c.

- A Kaua'i practitioner of hula and 'oli would retrace the path(s) taken by Hawaiian akua: Kahoaali'i and Pele by locating and experiencing various wahi pana (significant site) that are referenced in the mythologies. This study would enable hula and 'oli practitioners to gain deeper insight into the multiple meanings of various mele(songs) and hula(dance) by experiencing the surrounding natural environment from which the literature is inspired. By developing a sophisticated understanding of the interactions of Pele and various shark gods in the NWHI, detailed information of the dynamic natural environment may also be acquired. Further, relevant information that is uncovered as a result of the study would be incorporated into a place-based curriculum that would benefit the youth of Kaua'i.

- Another study to be conducted pertains to the utilization of a Hawaiian environmental monitoring tool: the Hawaiian moon calendar. More specifically, practitioners would aim to detect the discreet geo-spatial differences from specific localities within the main Hawaiian islands and the Northwestern Hawaiian islands. The application of the Hawaiian moon calendar to the marine environment within the Northwestern Hawaiian islands would help re-develop an understanding of spawning cycles, fish recruitment and aggregation patterns across the Hawaiian archipelago.

- Practitioners would make detailed observations to compare reef fish abundance and recruitment between the Northwestern Hawaiian islands and select near-shore community-managed areas. Understanding the spatial and temporal distribution of keystone reef species would inform the development and/or refinement of cultural resource management strategies and monitoring protocols in select community-managed areas in the main Hawaiian islands. In addition, specialists would undertake studies to observe the celestial sky and its various components including the moon, sun, stars, ocean swells and weather patterns.

These activities would help the Monument by strengthening its management of cultural resources and ensure the strong participation of Native Hawaiians in the region's long-term protection. By providing opportunities to conduct cultural research, practitioners would assist in the recovery of important Native Hawaiian marine management practices and advance Native Hawaiian traditional ecological knowledge. Additionally, the permitted cultural practitioners and researchers would be key to the development of an eventual cultural access and monitoring plan for the NWHI.

The activities described above may require the following regulated activities to occur in State waters:

☒ Swimming, snorkeling, or closed or open circuit SCUBA diving within any Special Preservation Area or Midway Atoll Special Management Area

REVIEW PROCESS:

The permit application was sent out for review and comment to the following scientific entities: Hawaii Division of Aquatic Resources, Hawaii Division of Forestry and Wildlife, Papahānaumokuākea Marine National Monument (NOAA/NOS), NOAA Pacific Islands Regional Office (NOAA-PIRO), and United States Fish and Wildlife Service Pacific Islands NW Refuge Complex Office. The Office of Hawaiian Affairs (OHA), and the Kaho'olawe Island Reserve Commission (KIRC) were also consulted.

Comments received from the scientific community are summarized as follows:

Scientific reviews support the acceptance of this application.

Concerns raised were:

1. The level of experience participants would have working in areas of high nesting seabird densities, and how this would be dealt with

Comments received from the Native Hawaiian community are summarized as follows:

Cultural reviews support the acceptance of this application.

No concerns were raised.

Additional reviews and permit history:

Are there other relevant/necessary permits or environmental reviews that have or will be issued with regard to this project? (e.g. MMPA, ESA, EA) Yes ☒ No ☐
If so, please list or explain:

- The proposed activities are in compliance with the National Environmental Policy Act.
- State of Hawaii DLNR Section 106 Compliance (pending)

Has Applicant been granted a permit from the State in the past? Yes ☐ No ☒
If so, please summarize past permits:

Have there been any a) violations: Yes ☐ No ☒
b) Late/incomplete post-activity reports: Yes ☐ No ☒

Are there any other relevant concerns from previous permits? Yes ☐ No ☒

RESPONSE:

1. The only activities under this permit that would be conducted on land would take place on Nihoa, and would be carried out in concert with activities detailed on Vincent Collins' permit application. Participants of these activities will be escorted on Nihoa by USFWS staff who will ensure that all regulations, and protocols are followed, including those related to the disturbance of nesting seabirds.

STAFF OPINION:

DAR staff is of the opinion that Applicant has properly demonstrated valid justifications for her application and should be allowed to enter the NWHI State waters and to conduct the activities therein as specified in the application with the following special instructions and conditions, which are in addition to the Papahānaumokuākea Marine National Monument Conservation and Management Permit General Conditions. The following special conditions have been vetted through the legal counsel of the Co-Trustee agencies.

1. To prevent introduction of disease or the unintended transport of live organisms, the permittee must comply with the disease and transport protocol attached to this permit.

2. Tenders and small vessels must be equipped with engines that meet EPA emissions requirements.

3. Refueling of tenders and all small vessels must be done at the support ships and outside the confines of lagoons or near-shore waters in the State Marine Refuge

4. No fishing is allowed in State Waters except as authorized under State law for subsistence, traditional and customary practices by Native Hawaiians.

MONUMENT MANAGEMENT BOARD OPINION:

The MMB is of the opinion that the Applicant has met the findings of Presidential Proclamation 8031 and this activity may be conducted subject to completion of all compliance requirements. The MMB concurs with the special conditions recommended by DAR staff.

RECOMMENDATION:

"That the Board authorize and approve, with stated conditions, a Native Hawaiian Practices Permit to Ms. Mahina Duarte, NOAA, Papahānaumokuākea Marine National Monument,."

Respectfully submitted,

DAN POLHEMUS
Administrator

APPROVED FOR SUBMITTAL

LAURA H. THIELEN
Chairperson

Papahānaumokuākea Marine National Monument

Native Hawaiian Practices Permit Application

NOTE: ***This Permit Application (and associated Instructions) are to propose activities to be conducted in the Papahānaumokuākea Marine National Monument. The Co-Trustees are required to determine that issuing the requested permit is compatible with the findings of Presidential Proclamation 8031. Within this Application, provide all information that you believe will assist the Co-Trustees in determining how your proposed activities are compatible with the conservation and management of the natural, historic, and cultural resources of the Papahānaumokuākea Marine National Monument (Monument).***

ADDITIONAL IMPORTANT INFORMATION:

- Any or all of the information within this application may be posted to the Monument website informing the public on projects proposed to occur in the Monument.

- In addition to the permit application, the Applicant must either download the Monument Compliance Information Sheet from the Monument website OR request a hard copy from the Monument Permit Coordinator (contact information below). The Monument Compliance Information Sheet must be submitted to the Monument Permit Coordinator after initial application consultation.

- Issuance of a Monument permit is dependent upon the completion and review of the application and Compliance Information Sheet.

INCOMPLETE APPLICATIONS WILL NOT BE CONSIDERED

Send Permit Applications to:
Papahānaumokuākea Marine National Monument Permit Coordinator
6600 Kalaniana'ole Hwy. # 300
Honolulu, HI 96825
nwhipermit@noaa.gov
PHONE: (808) 397-2660 FAX: (808) 397-2662

SUBMITTAL VIA ELECTRONIC MAIL IS PREFERRED BUT NOT REQUIRED. FOR ADDITIONAL SUBMITTAL INSTRUCTIONS, SEE THE LAST PAGE.

Papahānaumokuākea Marine National Monument
Permit Application Cover Sheet

This Permit Application Cover Sheet is intended to provide summary information and status to the public on permit applications for activities proposed to be conducted in the Papahānaumokuākea Marine National Monument. While a permit application has been received, it has not been fully reviewed nor approved by the Monument Management Board to date. The Monument permit process also ensures that all environmental reviews are conducted prior to the issuance of a Monument permit.

Summary Information

Applicant Name: Faylene Mahina Duarte
Affiliation: NOAA Papahanaumokuakea Marine National Monument

Permit Category: Native Hawaiian Practices
Proposed Activity Dates: June 1-August 31, 2008
Proposed Method of Entry (Vessel/Plane): Vessel
Proposed Locations: Nihoa, Mokumanamana, French Frigate Shoals, Gardner Pinnacles, Maro Reef, Laysan Island, Lisanski Island, Pearl and Hermes Atoll, Midway Island, and Kure Atoll

Estimated number of individuals (including Applicant) to be covered under this permit: Five individuals are to be covered under this permit
Estimated number of days in the Monument: 14 days

Description of proposed activities: (complete these sentences):

a.) The proposed activity would…
The proposed activity intends to faciltate cultural research in the field of traditional Native Hawaiian marine resource management. Consistent with proclamation 8031, these activities will strengthen cultural and spiritual connections to the Northwestern Hawaiian islands and foster the expansion and perpetuation of Native Hawaiian knowledge. By experiencing first-hand the abundance of Papahanaumokuakea, the contingent of cultural practitioners, will be better equiped to lead malama kai (marine conservation) initiatives back in their home communities, located in the main Hawaiian islands.

b.) To accomplish this activity we would ….
To accomplish these activities, cultural practitioners will undertake research that explores three key areas: the Pele, Kanemiloha'i and Kahoali'i mythologies, spatial differences of a Hawaiian moon calendar, and a comparative study between select community-managed areas in the main Hawaiian Islands and the Northwestern Hawaiian Islands.

A Kaua'i practitioner of hula and 'oli will retrace the path(s) taken by Hawaiian akua: Kahoaali'i and Pele by locating and experiencing various wahi pana (significant site) that are referenced in the mythologies. This study will enable hula and 'oli practitioners to gain deeper insight into the multiple meanings of various mele(songs) and hula(dance) by experiencing the surrounding natural environment from which the literature is inspired. By developing a sophisticated understanding of the interactions of Pele and various shark gods in the NWHI, detailed information of the dynamic natural environment may also be acquired. Further, relevant information that is uncovered as a result of the study will be incorporated into a place-based curriculum that will benefit the youth of Kaua'i.

The second study to be conducted pertains to the utilization of a Hawaiian environmental monitoring tool: the Hawaiian moon calendar. More specifically, practitioners will aim to detect the discreet geo-spatial differences from specific localities within the main Hawaiian Islands and the Northwestern Hawaiian Islands. The application of the Hawaiian moon calendar to the marine environment within the Northwestern Hawaiian Islands will help re-develop an understanding of spawning cycles, fish recruitment and aggregation patterns across the Hawaiian archipelago.

Last, practitioners will make detailed observations to compare reef fish abundance and recruitment between the Northwestern Hawaiian Islands and select near-shore community-managed areas. Understanding the spatial and temporal distribution of keystone reef species will inform the development and/or refinement of cultural resource management strategies and monitoring protocols in select community-managed areas in the main Hawaiian Islands. In addition, specialists will undertake studies to observe the celestial sky and its various components including the moon, sun, stars, ocean swells and weather patterns.

To ensure the success of these field studies, cultural specialists will perform appropriate protocol and offer ho'okupu(cultural offerings) to maintain the spiritual integrity of the cultural sites that are visited.

c.) This activity would help the Monument by …

This activity would help the Monument by strengthening its management of cultural resources and ensure the strong participation of Native Hawaiians in the region's long-term protection. By providing opportunities to conduct cultural research, practitioners will assist in the recovery of important Native Hawaiian marine management practices and advance Native Hawaiian traditional ecological knowledge. Additionally, the permitted cultural practitioners and researchers will be key to the development of an eventual cultural access and monitoring plan for the NWHI.

Other information or background: none

Section A - Applicant Information

1. Applicant

Name (last, first, middle initial): Duarte, Faylene, M.

Title: Policy Program Manager

1a. Intended field Principal Investigator (See instructions for more information):
Andy Collins, NOAA PMNM Education & Technology Coordinator
Kelly Gleason, NOAA, PMNM Maritime Archeologist

2. Mailing address (street/P.O. box, city, state, country, zip):

Phone:

Fax:

Email:

For students, major professor's name, telephone and email address:

3. Affiliation (institution/agency/organization directly related to the proposed project):
NOAA Papahanaumokuakea Marine National Monument

4. Additional persons to be covered by permit. List all personnel roles and names (if known at time of application) here (e.g. John Doe, Diver):
Cultural Practitioner-Celestial Navigation and Way-finding
Cultural Practitioner-Hula and chant
Cultural Practitioner-traditional Marine Resource Manager
Cultural Practitioner-traditional Marine Resource Manager
Cultural Practitioner-traditional Marine Resource Manager

Section B: Project Information

5a. Project location(s):

		Ocean Based	
☒ Nihoa Island	☒ Land-based	☒ Shallow water	☐ Deep water
☒ Necker Island (Mokumanamana)	☐ Land-based	☒ Shallow water	☐ Deep water
☒ French Frigate Shoals	☐ Land-based	☒ Shallow water	☐ Deep water
☒ Gardner Pinnacles	☐ Land-based	☒ Shallow water	☐ Deep water
☒ Maro Reef			
☒ Laysan Island	☐ Land-based	☒ Shallow water	☐ Deep water
☒ Lisianski Island, Neva Shoal	☐ Land-based	☒ Shallow water	☐ Deep water
☒ Pearl and Hermes Atoll	☐ Land-based	☒ Shallow water	☐ Deep water
☒ Midway Atoll	☐ Land-based	☒ Shallow water	☐ Deep water
☒ Kure Atoll	☐ Land-based	☒ Shallow water	☐ Deep water
☐ Other			

NOTE: There is a fee schedule for people visiting Midway Atoll National Wildlife Refuge via vessel and aircraft.

Location Description:
exact details to be determined

5b. Check all applicable regulated activities proposed to be conducted in the Monument:

☐ Removing, moving, taking, harvesting, possessing, injuring, disturbing, or damaging any living or nonliving Monument resource

☐ Drilling into, dredging, or otherwise altering the submerged lands other than by anchoring a vessel; or constructing, placing, or abandoning any structure, material, or other matter on the submerged lands

☐ Anchoring a vessel

☐ Deserting a vessel aground, at anchor, or adrift

☐ Discharging or depositing any material or matter into the Monument

☐ Touching coral, living or dead

☐ Possessing fishing gear except when stowed and not available for immediate use during passage without interruption through the Monument

☐ Attracting any living Monument resource

☐ Sustenance fishing (Federal waters only, outside of Special Preservation Areas, Ecological Reserves and Special Management Areas)

☐ Subsistence fishing (State waters only)

☒ Swimming, snorkeling, or closed or open circuit SCUBA diving within any Special Preservation Area or Midway Atoll Special Management Area

6 Purpose/Need/Scope ***State purpose of proposed activities:***
The central purpose of the expedition is to expand and advance traditional Native Hawaiian knowledge in the field of marine conservation and management. The primary objectives of the cultural expedition are to: (1) collect cultural data related to traditional Native Hawaiian marine management; (2) refine the application of traditional Hawaiian environmental monitoring tools and methodologies; (3) recover and generate new information concerning Hawaiian mythologies

7. Answer the Findings below by providing information that you believe will assist the Co-Trustees in determining how your proposed activities are compatible with the conservation and management of the natural, historic, and cultural resources of the Monument:

The Findings are as follows:

a. How can the activity be conducted with adequate safeguards for the cultural, natural and historic resources and ecological integrity of the Monument?
The activities will provide adequate safeguards towards cultural, natural and historic resources by adhering to all rules and regulations established by the Monument and its staff.

b. How will the activity be conducted in a manner compatible with the management direction of this proclamation, considering the extent to which the conduct of the activity may diminish or enhance Monument cultural, natural and historic resources, qualities, and ecological integrity, any indirect, secondary, or cumulative effects of the activity, and the duration of such effects?
Members of the expedition will adhere to all rules and regulations as established by the Monument and its staff. In addition to the prescribed rules, the cultural practitioners are interested in assisting with the development of a cultural resource monitoring and access plan.

c. Is there a practicable alternative to conducting the activity within the Monument? If not, explain why your activities must be conducted in the Monument.
No. There is no other place within the Hawaiian archipelago that can serve as a baseline of abundance for local community-based marine managers due to its remote locale and legal protection status. Because the Northwestern Hawaiian islands are remotely managed, this area serves as an optimal measure to determine expected abundances-as these practitioners are engaged in community-based near shore marine management in the main Hawaiian islands. Further, Native Hawaiian mele(songs) and mythologies that refer to the NWHI are better understood when experienced first-hand.

d. How does the end value of the activity outweigh its adverse impacts on Monument cultural, natural and historic resources, qualities, and ecological integrity?
The end value of the activitiy outweighs any adverse impacts by safeguarding against the loss of opportunity to expand Native Hawaiian knowledge relating to the NWHI. There is a great need to recover traditional Native Hawaiian marine ecosystem management practices, and as such, the Monument provides an unparalled venue to accomplish this.

e. Explain how the duration of the activity is no longer than necessary to achieve its stated purpose.
Fourteen days is a good starting point to develop an empirical based research regime. Preferably, the activity would extend for an entire month and even a summer to begin to accord a moon calendar for the NWHI.

f. Provide information demonstrating that you are qualified to conduct and complete the activity and mitigate any potential impacts resulting from its conduct.
I am qualified to conduct and complete the proposed as a practitioner of Hawaiian fishpond management and near-shore marine management for more than ten years. During my tenure as a fishpond manager, I regularly designed cultural research projects that informed real-time decision-making and devised solutions to address the pond's environmental challenges.

The cultural specialists that will perform various research activities are all highly trained in traditional near-shore marine management and fishery management. Combined, the practitioners represent nearly 150 years of field-based knowledge and information.

g. Provide information demonstrating that you have adequate financial resources available to conduct and complete the activity and mitigate any potential impacts resulting from its conduct.
The proposed activities are funded in full by NOAA, Papahanaumokuakea Marine National Monument.

h. Explain how your methods and procedures are appropriate to achieve the proposed activity's goals in relation to their impacts to Monument cultural, natural and historic resources, qualities, and ecological integrity.
The methods and procedures employed will be empirical and experiential based. These are widely accepted methods for acquiring data in the marine environmentst by Native Hawaiian marine practitioners. The proposed methodology will not require specialized equipment or require invasive examination and will also take into full account the fragility of the Monument's resources.

i. Has your vessel has been outfitted with a mobile transceiver unit approved by OLE and complies with the requirements of Presidential Proclamation 8031?
Berthing space upon a NOAA vessel to be determined.

j. Demonstrate that there are no other factors that would make the issuance of a permit for the activity inappropriate.
All permits required for access and conducting cultural observations of the marine environment will be obtained for this access, including a section 106 letter. Also, several members from the Native Hawaiian cultural working group have been consulted regarding the activities to be permitted under this application.

ADDITIONAL FINDINGS FOR PROPOSED NATIVE HAWAIIAN PRACTICES

k. Explain how the activity is non-commercial and will not involve the sale of any organism or material collected.
The activity is non-commercial and will not involve the removal of any organism outside of the Monument. The end-value of the activity is informational and spiritually focused and does not in any way or form involve the sale of organisms.

l. Explain how the purpose and intent of the activity is appropriate and deemed necessary by traditional standards in the Native Hawaiian culture (pono), and demonstrate an understanding of, and background in, the traditional practice and its associated values and protocols.
The purpose and intent of the proposed activity is appropriate and pono by traditional standards in the Native Hawaiian culture in that the expedition is centered around enhancing traditional marine resource management skills through careful observation. The ability to increase or maintain productivity of a particular kai(fishery) is integral to maintaining traditional Native Hawaiian knowledge and marine management systems; and is therefore consistent with pono marine stewardship tenets.

m. Explain how the activity benefits the resources of the Northwestern Hawaiian Islands and the Native Hawaiian community.
The data collected from these field studies will better enable these practitioners to understand the biological, spiritual and cultural connections bewteen the NWHI and the main Hawaiian islands. And in doing so, practitioners will be better equipped to manage their areas in the main Hawaiian islands from which the Northwestern Hawaiian islands will ultimately benefit.

n. Explain how the activity supports or advances the perpetuation of traditional knowledge and ancestral connections of Native Hawaiians to the Northwestern Hawaiian Islands.
The group of cultural practitioners being selected for this expedition posses intricate knowledge of traditional Native Hawaiian marine management practices in the near shore fishery area within their own ahupua'a. Of equal importance, knowledge gained will be utilized to inform local marine management and conservation education within their home communities. Each practitioner will reflect upon traditional concepts like 'aina momona(bountiful lands), ho'omalu(regulated activities) and kapu(prohibited activities) which are fundamental in traditional Native Hawaiian marine management.

o. Will all Monument resources harvested in the Monument be consumed in the Monument? If not, explain why not.
No.

8. Procedures/Methods:
To accomplish these activities, cultural practitioners will undertake research that explores three key areas: the Pele, Kanemiloha'i and Kahoali'i mythologies, spatial differences of a Hawaiian moon calendar, and a comparative study between select community-managed areas in the main Hawaiian Islands and the Northwestern Hawaiian Islands.

A Kaua'i practitioner of hula and 'oli will retrace the path(s) taken by Hawaiian akua: Kahoaali'i and Pele by locating and experiencing various wahi pana (significant site) that are referenced in

the mythologies. This study will enable hula and 'oli practitioners to gain deeper insight into the multiple meanings of various mele(songs) and hula(dance) by experiencing the surrounding natural environment from which the literature is inspired. By developing a sophisticated understanding of the interactions of Pele and various shark gods in the NWHI, detailed information of the dynamic natural environment may also be acquired. Further, relevant information that is uncovered as a result of the study will be incorporated into a place-based curriculum that will benefit the youth of Kaua'i.

The second study to be conducted pertains to the utilization of a Hawaiian environmental monitoring tool: the Hawaiian moon calendar. More specifically, practitioners will aim to detect the discreet geo-spatial differences from specific localities within the main Hawaiian Islands and the Northwestern Hawaiian Islands. The application of the Hawaiian moon calendar to the marine environment within the Northwestern Hawaiian Islands will help re-develop an understanding of spawning cycles, fish recruitment and aggregation patterns across the Hawaiian archipelago.

Last, practitioners will make detailed observations to compare reef fish abundance and recruitment between the Northwestern Hawaiian Islands and select near-shore community-managed areas. Understanding the spatial and temporal distribution of keystone reef species will inform the development and/or refinement of cultural resource management strategies and monitoring protocols in select community-managed areas in the main Hawaiian Islands. In addition, specialists will undertake studies to observe the celestial sky and its various components including the moon, sun, stars, ocean swells and weather patterns.

To ensure the success of these field studies, cultural specialists will perform appropriate protocol and offer ho'okupu(cultural offerings) to maintain the spiritual integrity of the cultural sites that are visited.

NOTE: If land or marine archeological activities are involved, contact the Monument Permit Coordinator at the address on the general application form before proceeding, as a customized application will be needed. For more information, contact the Monument office on the first page of this application.

9a. Collection of specimens - collecting activities (would apply to any activity): organisms or objects (List of species, if applicable, attach additional sheets if necessary):

Common name:

Scientific name:

Hawaiian name:

& size of specimens:

Collection location:

☐ Whole Organism ☐ Partial Organism

9b. What will be done with the specimens after the project has ended?
n/a

9c. Will the organisms be kept alive after collection? ☐ Yes ☐ No
n/a

• General site/location for collections:
n/a

• Is it an open or closed system? ☐ Open ☐ Closed
n/a

• Is there an outfall? ☐ Yes ☐ No
n/a

• Will these organisms be housed with other organisms? If so, what are the other organisms?
n/a

• Will organisms be released?
n/a

10. If applicable, how will the collected samples or specimens be transported out of the Monument?
not applicable

11. Describe any fixed or semi-permanent structures or installations, or cultural offerings you plan to leave in the Monument:
A culturing offering of pa'akai(salt) may remain in the Monument.

12. List all specialized gear and materials to be used in the proposed activities:
none

13. List all Hazardous Materials you propose to take to and use within the Monument:
none

14. Describe collaborative activities to share samples, cultural research and/or knowledge gained in the Monument:
Cultural specialists will present findings to youth in various educational venues and incorporate into local curricula as appropriate. Presentation format will vary from multi-media platforms to the performing arts.

15a. Will you produce any publications, educational materials or other deliverables?
☒ **Yes** ☐ **No**

15b. Provide a time line for write-up and publication of information or production of materials:
A copy of all publications and/or educational materials will be completed within six months from date of return.

16. If applicable, list all Applicant's publications directly related to the proposed project:
not applicable

With knowledge of the penalties for false or incomplete statements, as provided by 18 U.S.C. 1001, and for perjury, as provided by 18 U.S.C. 1621, I hereby certify to the best of my abilities under penalty of perjury of that the information I have provided on this application form is true and correct. I agree that the Co-Trustees may post this application in its entirety on the Internet. I understand that the Co-Trustees will consider deleting all information that I have identified as "confidential" prior to posting the application.

Signature Date

SEND ONE SIGNED APPLICATION VIA MAIL TO THE MONUMENT OFFICE BELOW:

Papahānaumokuākea Marine National Monument Permit Coordinator
6600 Kalaniana'ole Hwy. # 300
Honolulu, HI 96825
FAX: (808) 397-2662

DID YOU INCLUDE THESE?
☐ Applicant CV/Resume/Biography
☐ Intended field Principal Investigator CV/Resume/Biography
☐ Electronic and Hard Copy of Application with Signature
☐ Statement of information you wish to be kept confidential
☐ Material Safety Data Sheets for Hazardous Materials

Papahānaumokuākea Marine National Monument
Compliance Information Sheet

1. **Updated list of personnel to be covered by permit. List all personnel names and their roles here (e.g. John Doe, Diver; Jane Doe, Field Technician, Jerry Doe, Medical Assistant):**

Mahina Duarte, Principal Investigator
Angela Hi'ilei Kawelo, Native Hawaiian Cultural Practitioner
Vincent Collins, Field Principal Investigator (July cruise)
Dr. Kelly Gleason, Field Principal Investigator (July-August cruise)
Legario Hank Eharis, Native Hawaiian Cultural Practitioner
Gary Oamilda, Native Hawaiian Cultural Practitioner
Mervin Dudoit, Native Hawaiian Cultural Practitioner
Wayne "Palala" Harada, Native Hawaiian Cultural Practitioner
Scott Kekuewa Kikiloi, Native Hawaiian Cultural Practitioner and Archaeologist (University of Hawaii)
Hoku Johnson, Data Manager

2. Specific Site Location(s): (Attach copies of specific collection locations): Nihoa, Mokumanamana, French Frigate Shoals, Pearl and Hermes, Midway and Kure atolls

3. Other permits (list and attach documentation of all other related Federal or State permits): none

3a. For each of the permits listed, identify any permit violations or any permit that was suspended, amended, modified or revoked for cause. Explain the circumstances surrounding the violation or permit suspension, amendment, modification or revocation. none

4. Funding sources (Attach copies of your budget, specific to proposed activities under this permit and include funding sources. See instructions for more information): NOAA, Papahanaumokuakea Marine National Monument

5. Time frame:
Activity start: July 13, 2008
Activity completion: August 28, 2008

Dates actively inside the Monument:
From: July 13, 2008; July 31, 2008
To: July 25, 2008; August 28, 2008

Describe any limiting factors in declaring specific dates of the proposed activity at the time of application: weather

Personnel schedule in the Monument: none

6. Indicate (with attached documentation) what insurance policies, bonding coverage, and/or financial resources are in place to pay for or reimburse the Monument trustees for the necessary search and rescue, evacuation, and/or removal of any or all persons covered by the permit from the Monument: All participants will purchase DAN insurance by departure date.

7. Check the appropriate box to indicate how personnel will enter the Monument:

☒ Vessel
☐ Aircraft

Provide Vessel and Aircraft information: Participants will access the Monument aboard NOAA Ship HI'IALAKAI

8. The certifications/inspections (below) must be completed prior to departure for vessels (and associated tenders) entering the Monument. Fill in scheduled date (attach documentation):

☐ Rodent free, Date:
☐ Tender vessel, Date:
☐ Ballast water, Date:
☐ Gear/equipment, Date:
☐ Hull inspection, Date:

9. Vessel information (NOTE: if you are traveling aboard a National Oceanic and Atmospheric Administration vessel, skip this question):
Vessel name:
Vessel owner:
Captain's name:
IMO#:

Vessel ID#:
Flag:
Vessel type:
Call sign:
Embarkation port:
Last port vessel will have been at prior to this embarkation:
Length:
Gross tonnage:
Total ballast water capacity volume (m3):
Total number of ballast water tanks on ship:
Total fuel capacity:
Total number of fuel tanks on ship:
Marine Sanitation Device:
Type:

Explain in detail how you will comply with the regulations regarding discharge in the Monument. Describe in detail. If applicable, attach schematics of the vessel's discharge and treatment systems:

Other fuel/hazardous materials to be carried on board and amounts:

Provide proof of a National Oceanic and Atmospheric Administration (NOAA) Office of Law Enforcement-approved Vessel Monitoring System (VMS). Provide the name and contact information of the contractor responsible for installing the VMS system. Also describe VMS unit name and type:

VMS Email:
Inmarsat ID#:

10. Tender information:

On what workboats (tenders) will personnel, gear and materials be transported within the Monument? List the number of tenders/skiffs aboard and specific types of motors:

Additional Information for Land Based Operations

11. Proposed movement of personnel, gear, materials, and, if applicable, samples: all activities proposed on Nihoa Island will be conducted under the supervision of Monument (FWS) staff.

12. Room and board requirements on island: none

13. Work space needs: none

DID YOU INCLUDE THESE?

- ☐ Map(s) or GPS point(s) of Project Location(s), if applicable
- ☐ Funding Proposal(s)
- ☐ Funding and Award Documentation, if already received
- ☐ Documentation of Insurance, if already received
- ☐ Documentation of Inspections
- ☐ Documentation of all required Federal and State Permits or applications for permits

Cultural Research Abstract

Education Cruise (July)

Experience Profile: Wayne "Palala" Harada

- Native of Wainiha, Kaua'i
- 25 years of direct stewardship experience within North shore Kaua'i
- Trained with esteemed kupuna of Wainiha and Hä'ena, Kaua'i
- Education Program Coordinator, Hanalei Watershed Hui
- 10 years as a community instructor of Hawaiian fishing practices for local youth including programs such as Nä Pua No'eau
- Member, MBT Network, statewide consortia of local marine resource managers and educators
- Volunteer, Makai Watch
- Student of Hula, Kumu Kehau Kekua
- Student, Kaua'i Community College

Project Summary:

The project's aim is to examine the ancient shark mythologies of Kahoaali'i, Kühaimoana, and Känemiloha'i within the local context of the islands of Nihoa, Mokumanamana, Mokupäpapa, and Hä'ena mä. The objective of the proposed field study is to gain deeper contextual insight into the inoa 'äina (place names) that are mentioned within written and oral mythologies such as the legend of 'Aukelenuiaikü. It is anticipated that by experiencing first-hand the dynamic forces and interactions of the physical and natural elements, the ancestral relationship between Hä'ena, Kaua'i and Hä'ena mä will increase in depth. Specific traditional mele, hula, and mo'olelo will be consulted to inform the proposed field activities. It is proposed to conduct various cultural protocol that will entail the offering of diluted 'awa and water to the seas of Hä'ena mä; and a series of pule (prayers) and mele (song/poem/chant).

Activity Description:

- conduct various cultural protocol by offering diluted 'awa and water, pule, and mele
- snorkel in near shore area, between depths of 3-30ft to make visual observations of various shark behaviors
- make observations of local weather patterns and celestial phenomena from the NOAA vessel
- attempt to locate important wahi pana (significant areas) cited in literature and through oral histories, with guidance by USFW escort
- record coordinates of various wahi pana with hand-held gps where ever appropriate
- document observations with wet/dry field notes and underwater digital still photography

Results of Study:

- develop a written report detailing observations and describe relevance and benefit to Monument management activities
- a presentation of the overall experience will be shared with local organizations such as: the Hanalei Watershed Hui, Limahuli Gardens, Waipä Foundation, and Kanu I ka Pono Charter School
- potential to develop follow-up place-based educational curricula with cultural formats to promote ocean literacy

Locations:

- SPAs at the following locations: Nihoa, Mokumanamana, Mokupäpapa

Cultural Research Abstract

Education Cruise (July)

Experience Profile: Mervin Dudoit

- Native of Moloka'i
- 40 years as a commercial and subsistence fisherman-Moloka'i, Maui and Läna'i
- 40 years experience as a boat captain and dive master
- Comprehensive knowledge of net fishing and spear fishing techniques and their associated cultural values
- 10 years of direct marine stewardship experience for the Southeastern shores of Moloka'i
- Board Member, Vice President, Ka Honua Momona International, a local non-profit focused on indigenous natural resource management and indigenous education
- 10 years as a community instructor of Hawaiian fishing practices for local youth

Project Summary:

The goal of the project is to begin to accord a place-based Hawaiian moon calendar to monitor select in-shore areas and key marine species of select areas within the Northwestern Hawaiian Islands. The above will be accomplished by collecting sets of data that describe key reef fish population structures, fish aggregations, and spawning behaviors in relation to the lunar and seasonal calendars over an extended period. Recognizing that Hawaiian moon calendars are typically developed over multiple lunar cycles and wet/dry seasons, this field study will work cooperatively with the cultural researchers that will participate in the Maritime Heritage cruise from July 31-August 28 in order to amass data for the entire Hinaia'ele'ele season.

Finally, this field study will enable Moloka'i cultural practitioners and marine resource stewards to calibrate their current marine monitoring activities and techniques by experiencing a nearly pristine marine system; as well as to provide a unique venue to compare and assess local variations between a Moloka'i moon calendar and an emerging Papahänaumokuäkea moon calendar. This study is consistent with proclamation 8031 to assure cultural accesses for Native Hawaiian activities.

Activity Description:

- snorkel in near shore area, between depths of 3-30ft to make visual assessments of reef fish population structures, fish aggregations and spawning behaviors
- make observations of local weather patterns and celestial phenomena from the NOAA vessel
- document observations with wet/dry field notes and underwater digital still photography

Results of Study:

- develop a written report detailing observations and describe relevance and benefit to Monument management activities
- a presentation of the overall experience will be shared with Ka Honua Momona youth participants, Board members and volunteers; and possibly with members of Hui Mälama o Mo'omomi
- potential to develop a collaborative research project with Hui Mälama o Mo'omomi to compare select Moloka'i Hawaiian moon calendars with an emerging Papahänaumokuäkea moon calendar

Locations:

- SPAs at the following locations: Nihoa, Mokumanamana, Mokupäpapa

Cultural Research Abstract

Education Cruise (July)

Experience Profile: Legario Hank Eharis

- Native of Koali, Hāna, Maui
- 35 years of subsistence fishing experience
- 25 years service at Haleakalā National Park; performs watershed management services
- Trained with esteemed kupuna in Hawaiian fishing practices and Hawaiian marine conservation practices
- Serves as Chair person of Fishery board for local non-profit group, Nā Mamo o Mū'ōle'a which seeks to conserve and manage cultural and natural marine resources of Mū'ōle'a, Hāna

Project Summary:

The project's goal is to develop a Hawaiian framework to better manage the cultural and natural marine resources of Mu'ōle'a, Hāna, Maui by making visual comparisons of the coral reef ecosystem structures and sub-tidal areas of Nihoa, Mokumanamana and Mokupāpapa, located within the Northwestern Hawaiian islands. The primary objective of the proposed project is to examine culturally important marine species within areas that are largely devoid of human pressures and other related anthropogenic influences. To achieve this objective, a set of detailed observations and interactions will be conducted to inform and potentially refine current marine management frameworks that are in place at Mu'ōle'a. Visual assessments will also be made to attempt to detect land and sea interactions and relationships.

These activities are consistent with the Native Hawaiian Practices findings as defined in the Federal Register 50 CFR Part 404 to conduct cultural activities for the purposes of perpetuating traditional knowledge, caring for and protecting the environment and strengthening cultural and spiritual connections to the Northwestern Hawaiian Islands that have demonstrable benefits to the Hawaiian community. This field study will provide comparative value of 'opihi stocks within Hāna, Maui, Kaho'olawe, and select areas of Nihoa, Mokumanamana and Mokupāpapa. Data collected from various field studies will help guide the development of an eventual 'opihi monitoring regime, in partnership with the Nature Conservancy Hawai'i and the Hawai'i Institute of Marine Biology.

Activity Description:

- make visual assessments of coastal flora composition of Nihoa and Mokumanamana, while on walking educational tour, guided by an appointed USFW escort
- snorkel in depths ranging from 3-40 feet to make visual assessments of fish assemblages, juvenile recruitment and spawning patterns, reef fish population dynamics and interactions
- snorkel in shallow depths to make visual assessments of 'opihi assemblages within the sub-tidal area
- document and record observations with wet/dry field notes and digital camera with underwater housing

Results of Study:

- develop a written report detailing observations and describe relevance and benefit to Monument management activities
- develop a power point to share with Nā Mamo o Mū'ōle'a and other local community groups

Cultural Research Abstract

Maritime Heritage Cruise (August)

Experience Profile: Angela Hi'ilei Kawelo

- 30 years of direct stewardship experience within Käne'ohe Bay
- 8th generation fisherwoman of Käne'ohe Bay, known for collection of He'e
- Current Executive Director of non-profit group, Paepae o He'eia, an institution focused on Hawaiian marine resource management and aquaculture, and eco-cultural education
- 5 years employed as a research lab technician at the Oceanic Institute
- Käne'ohe Bay Regional Council Member, appointed position by the Governor's office
- Lecturer, UH Mänoa, Center for Hawaiian Studies-Hawaiian Aquaculture course
- Scuba certified
- Contributor, *Ka 'Oihana Lawai'a: Hawaiian Fishing Traditions*
- B.A., Zoology, UH Mänoa

Project Summary:

The project's goal is to compare culturally important marine species of Käne'ohe Bay and the Northwestern Hawaiian Islands. The primary objective of the proposed project is to develop a cultural assessment tool to survey the health of culturally important marine systems of Käne'ohe Bay. As such, it is proposed to determine a baseline of healthy coral reef ecosystems by making detailed visual observations of coral reef structures, the composition of the sub-tidal zone, and reef fish assemblages within select locations of the Northwestern Hawaiian Islands. Further, collaboration between Dr. Ku'ulei Rodgers of the Hawai'i Institute of Marine Biology is being explored to develop a cultural health index tool to survey Hawaiian coral reef ecosystems, in parallel to Dr. Rodger's ecological coral reef ecosystem health index. This field study will better equip cultural practitioners of Käne'ohe Bay to care and conserve marine resources located within Käne'ohe Bay; thus promoting cultural connectivity throughout the Hawaiian archipelago, a purpose consistent with proclamation of 8031.

Activity Description:

- snorkel in near shore area between depths of 3-30ft to make visual assessments of coral reef structures, macro-alga cover, large reef fish assemblages, and invertebrate populations within sub-tidal areas
- snorkel in depths ranging from 3-40 feet to observe fish assemblages, juvenile recruitment and spawning patterns, reef fish population dynamics and interactions for an emerging Papahänaumokuäkea moon calendar
- document observations with wet/dry field notes and underwater digital still photography

Results of Study:

- develop a written report detailing observations and describe relevance and benefit to Monument management activities
- a power-point presentation of the overall experience will be shared at the following venues: Käne'ohe Bay Family Feud Fishing Tournament, Käne'ohe Bay Regional Council Meeting, Ko'olaupoko Civic Club
- potential to develop collaborative research project with Dr. Ku'ulei Rodgers, Hawai'i Institute of Marine Biology to create a cultural index to survey the health of key marine resources and/or coral reef ecosystems within Käne'ohe Bay

Locations:

- SPAs at the following locations: French Frigate Shoals, Pearl and Hermes Atoll, Midway Atoll, and Kure Atoll

Cultural Research Summary

Maritime Heritage Cruise (August)

Experience Profile: Gary Oamilda

- 50 years of subsistence fishing experience; specializing in net fishing
- 10 years of commercial fishing experience
- Trained under esteemed kupuna in Hawaiian fishing practices
- Founding member of KUPA, a local not for profit aimed at managing and conserving marine resources of Ho'okena, Hawai'i
- Active NOAA volunteer, monitoring dolphin populations in Ho'okena, Hawai'i
- U.S. Veteran

Project Summary:

The goal of the project is to gain an understanding of the relationship between local atmospheric and oceanic conditions and the productivity of Northwestern Hawaiian coral reef ecosystems. The project's primary objective is to begin to develop a local moon calendar that will look at elements such as: fish assemblages, juvenile recruitment, larval or spawning patterns, and reef species interactions in association with local weather and ocean conditions and lunar and ecliptic cycles. The central questions that will drive the research are as follows: Why are these ecosystems productive? What are the geo-physical and bio-physical factors that attribute to its abundance/productivity? How can I accord a baseline of abundance in which to better manage and conserve local marine resources of Ho'okena, Hawai'i?

This field experience will enrich cultural relationships to the Northwestern Hawaiian Islands and provide an important venue to hone and refine cultural practices within the disciplines of adaptive Hawaiian marine resource and place-based management.

Activity Description:

- make daily and nightly celestial, atmospheric and oceanographic observations; utilizing star charts, tide calendars and available topographic maps
- snorkel in depths ranging from 3-40 feet to make visual assessments of fish assemblages, juvenile recruitment and spawning patterns, population dynamics and interactions
- document and record observations with wet/dry field notes and video camera with underwater housing

Results of Study:

- develop a written report detailing observations and describe relevance and benefit to Monument management activities
- develop a traveling exhibit to educate youth and communities within the Kona-Ka'ü districts about the overall experience and garner support around local conservation of marine areas
- potential venues of interest may include: KUPA(local non-profit) general meeting, Kona waena Intermediate and High-school marine science classes, Ka'ü Intermediate and High school science classes, West Hawai'i Exploratory Academy, Ka 'Ehukai o ke Kai Malino Hawaiian Immersion School

Locations:

- SPAs at the following locations: French Frigate Shoals, Pearl and Hermes Atoll, Midway Atoll, and Kure Atoll